

Chairside Chest

Build this six-drawer pine pleaser in a couple of weekends using just your tablesaw and a few basic tools.

BASIC-BUILT

GREAT PROJECTS MADE SIMPLE.

TOOLS NEEDED



Start with the cabinet

1 Cut a $\frac{3}{4}$ ×26×18" plywood blank for the interior sides (A). Cut and glue a $\frac{3}{4}$ × $\frac{3}{4}$ ×18" interior side trim (B) to each edge of the plywood [Drawing 1] and allow to dry. (This panel will be cut to length and ripped into two parts later.)

Quick Tip! Working with an oversize panel allows you to cut dados across just one panel. Later, after you rip the sides to final width, the dados will align perfectly between the two sides. And ripping the trim edge to final thickness removes any tear-out or clamping compression marks.

2 Edge-glue [More Resources, page 31] two $\frac{3}{4}$ ×15×19 $\frac{1}{4}$ " pine blanks for the exterior sides (C) [Drawing 1]. Set them aside for now.

3 From $\frac{3}{4}$ " pine, cut the frame fronts and backs (D) and sides (E) to size [Drawing 1, Materials List]. Using a pocket-hole jig and drill [More Resources], bore the pocket holes in each end of the sides. Glue and screw the frames together with 1 $\frac{1}{4}$ "-long coarse-thread pocket-hole screws [Photo A].

4 Trim an end of the interior-side assembly (A/B) square to an edge (see More Resources for plans to make a cross-cut sled), and crosscut it to 17 $\frac{7}{16}$ " long. Mark the locations of the dados onto the interior-side trim [Drawing 2]. (See the Shop Tip on the next page for help in

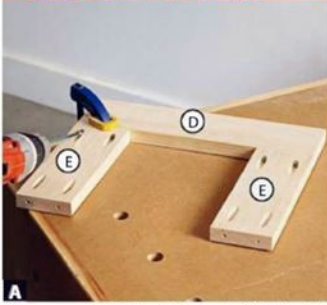
making accurate layout marks.) Install a $\frac{1}{4}$ "-wide dado blade in your tablesaw and cut the dados in the panel [Photo B].

5 Rip the interior-side (A/B) blank into two 13 $\frac{1}{2}$ "-wide parts, measuring from the edge of the trim (B). Reposition the rip fence for a 13"-wide cut, place

Overall dimensions: 16"W × 16"D × 23 $\frac{1}{4}$ "H
Materials and supplies cost: approx. \$100

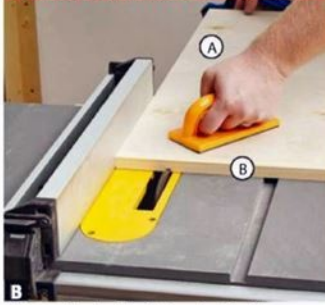


POCKET-SCREW THE FRAMES



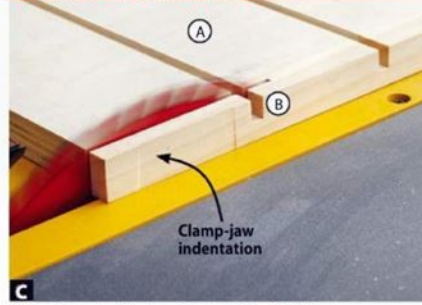
A Clamp across the joint with the ends of the front/back (D) flush with the outer edge of a side (E), then screw them together.

CUT THE DRAWER-GUIDE DADOES



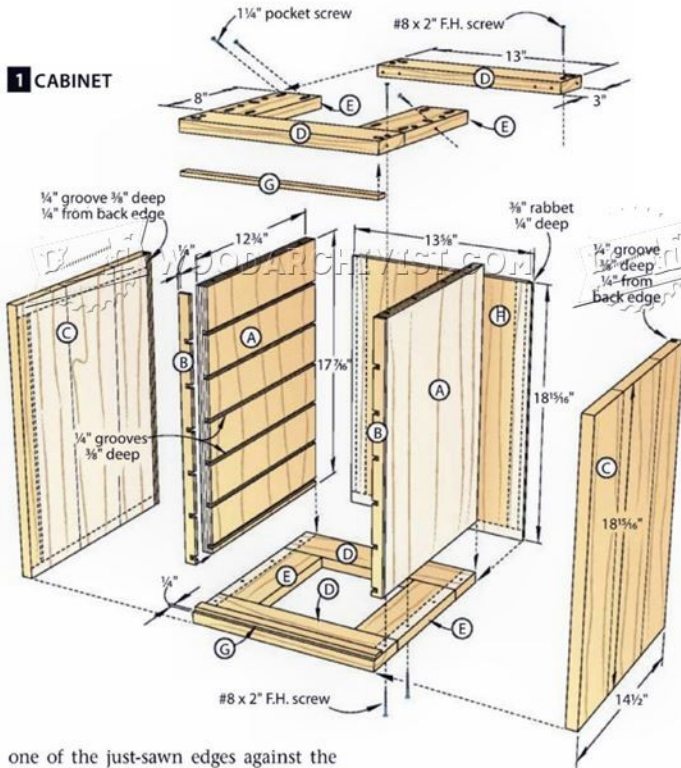
B After positioning the rip fence to align the dado blade with a layout mark, make the cut, maintaining pressure against the fence.

RIP AWAY THE "SAFETY NET"



C After cutting the interior-side assemblies (A/B) to rough width, cut away all but $\frac{1}{4}$ " of the trim for a clean, damage-free edge.

1 CABINET



one of the just-sawn edges against the fence, and rip the assembly to final width [Drawing 2, Photo C]. Repeat for the remaining blank.

6 From $\frac{3}{4}$ " pine, rip fourteen $\frac{1}{4}$ "-wide strips 13" long. Set two strips aside to use in the next step as the drawer-face trim (G). Glue and clamp 12 strips into the dadoes in the interior-side assem-

blies (A/B) to serve as drawer guides (F) [Drawing 4].

7 Dry-fit and clamp the interior-side assemblies (A/B/F) between the top and bottom frames (D/E), flush at the back of the cabinet. Next, drill $\frac{3}{32}$ " pilot holes for the screws that will join these

SHOP TIP

Does your pencil need to go on a diet?

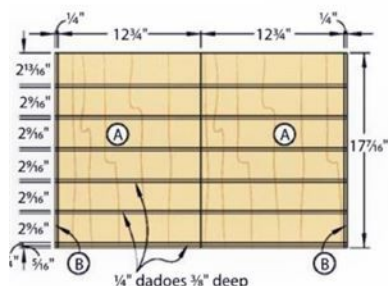
Cutting to the wrong side of a fat, imprecise pencil line can throw off accuracy by as much as $\frac{1}{16}$ ". Improve your results by marking thinner-than-a-whisker layout lines with a marking knife, which makes a line far finer than a carpenter pencil. Even a 4H pencil (sold in art and office supply stores) makes a line about half the width of a typical no. 2 pencil.



Dado location marked with a marking knife



2 INTERIOR-SIDE ASSEMBLY



assemblies [Drawing 1]. Then, glue and clamp the drawer-face trim (G) on the front of the frames, butting them against the interior-side trim (B). When the glue has dried, remove the clamps and drill six pocket holes in each frame for the screws that will connect the frames to the exterior sides (C).

8 Assemble the carcass [Drawing 1, Photo D]. Then, retrieve the exterior sides (C), crosscut one end of each square to an edge; then, cut them to final size. Rip a 1/4" groove in each exterior side for the back panel where shown. Secure the exterior sides to the cabinet assembly with pocket screws [Photo E]. **Note:** Do not use glue. This will prevent wood splits later as the solid-wood panels shrink and swell with seasonal humidity changes.

9 Glue up a blank for the back (H) from 1/2" pine [Drawing 1]. Glue up a blank for the top (I) from 3/4" pine [Drawing 4]. After the glue has dried, cut these parts to size, sand them smooth, and set them aside for later. **Note:** Leaving the back and top off the cabinet allows easy access to the drawers as you custom-fit them to the cabinet.

Quick Tip! If you can find 1/2" pine plywood with a face made up of grain and coloration similar to your pine lumber, you can substitute that for the solid-wood back. This project might be visible from all sides, so make sure the back is visually appealing too.

Now make the drawers

1 From 1/2" pine, cut to size the drawer fronts and backs (J) and sides (K) for all six drawers [Drawing 3]. Rip grooves for the drawer bottoms in two passes, with the second removing just enough material to create a snug fit of the plywood from which you'll cut the bottoms (L); make test cuts in scrap, adjusting the rip fence position as needed.

CONNECT THE FRAMES AND SIDES...



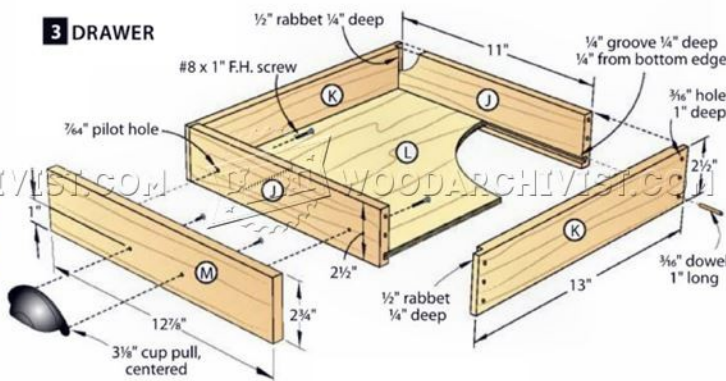
Glue and screw the frame assemblies (D/E/G) to the interior-side assemblies (A/B/F) with the back edges flush.

...AND THEN THE EXTERIOR SIDES



Clamp the cabinet assembly (A/B/D-G) to an exterior side (C) flush at the front edges, and then pocket-screw them together.

3 DRAWER



2 Install a 3/8" dado set in the tablesaw, and position the rip fence 1/8" away from it to cut rabbets in the drawer sides (K) [Drawing 3]. Then, hold a side against your miter gauge with the end touching the fence, and make a dado cut. Slide the workpiece away from the blade and complete the rabbet by cutting off the remaining bit at the end.

3 Retrieve the cabinet back (H), and position the rip fence 13 3/8" from the far side of the dado blade. Cut the 3/8" rabbets along both edges [Drawing 1]. Check the fit of the back in the cabinet; enlarge the rabbets if needed. Set the back aside again.

3 Dry-fit a drawer box and measure for the drawer bottoms (L)—the distance between opposing sides plus the depths of the grooves, minus 1/16". Cut six bottoms to size from 1/4" plywood [Draw-

ing 3]. Insert one of the bottoms into a drawer box to test the fit. When satisfied, sand all drawer parts; then glue and clamp each drawer.

4 After the glue has dried, drill three 3/16" holes 1" deep into each corner [Drawing 3, Photo F]. Glue a dowel into each hole, allow them to dry, and then trim and sand them flush.

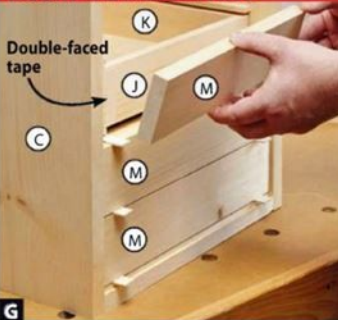
5 From 3/4" pine, cut the drawer false fronts (M) to size [Drawing 3] and temporarily mount them to the drawer boxes [Photo G]. Drill 3/4" pilot holes through each drawer-box front and 1/2" into the back face of each false front. Mark the drawers and false fronts so you can pair them up again later, and then remove the false fronts. Lay out and drill screw-mounting holes for the cup pulls on the false fronts. Sand the false fronts smooth, but don't reattach them yet.

DOWEL THE DRAWER JOINTS



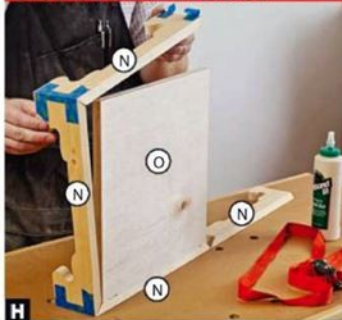
Use a shop-made guide block to help you drill the dowel holes perpendicular to and perfectly centered in the drawer fronts and backs (J).

MOUNT THE FALSE FRONTS



Using $\frac{1}{16}$ "-thick spacers to keep a consistent reveal, temporarily mount the false fronts (M) to the drawer boxes using double-faced tape.

GLUE AND CLAMP THE BASE



Painter's tape holds the bevel joints together as you wrap the aprons (N) around the bottom panel (O). Tighten a band clamp around the aprons.

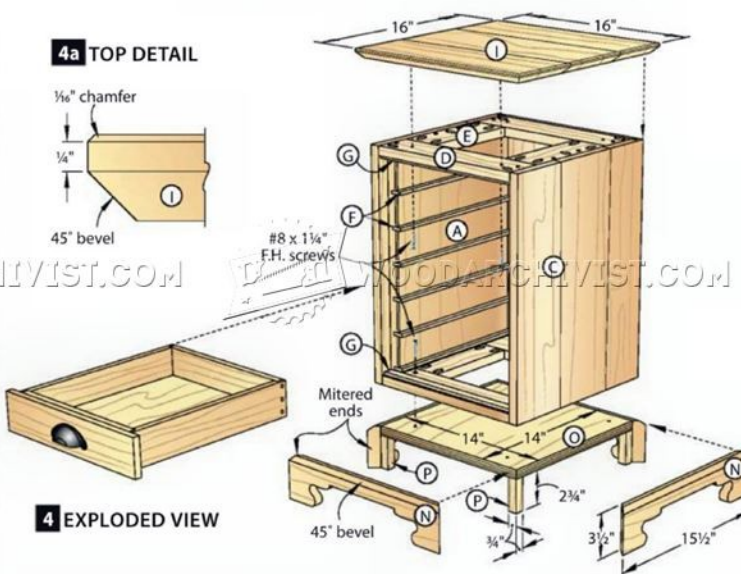
Turn to the top and base

1 From $\frac{3}{4}$ " stock, cut the base aprons (N) to final width and 2" longer than shown [Drawing 4].

2 Cut out a $\frac{3}{4}$ "x14"x14" plywood bottom panel (O) [Drawing 4]. Miter-cut the base aprons (N) at 45° to fit snugly around the bottom panel. Make a copy of the **Base Apron Pattern** from the *WOOD PATTERNS* insert on page 37 and make a template [Shop Tip, below], then use it to create the design for all four aprons. Sand the apron edges and faces smooth.

3 Lay the base aprons (N) end to end so the tips of the miters touch. Tape across the three joints with painter's tape. Fold this assembly around the bottom panel (O) [Photo H] and secure the last joint with tape. When you're satisfied with the fit, undo one joint, apply glue to the bottom panel's edges and the apron miters, and reattach the apron around the bottom.

4 Rip the glue blocks (P) to width and cut them to length so they fit behind



SHOP TIP

Make multiple identical parts with a template

To make four aprons (N) for the base and ensure they match, create a template of the **Base Apron Pattern** from $\frac{1}{4}$ " hardboard (or any similar material). Begin by adhering a copy of the pattern onto the hardboard with spray adhesive. Use a $\frac{7}{8}$ " Forstner bit to drill out the hole where marked before cutting the remainder of the pattern with a jigsaw. Sand the edges smooth. Lay the template onto an apron and trace the pattern. Position the Forstner bit (removed from the drill) in place where you drilled and lightly tap it to mark the location, as shown right. Repeat for each end of all the aprons. Finally, drill and jigsaw each apron, shown far right, as you did when making the pattern.



the miters. Glue them in place [Drawing 4, Photo I].

5 At the tablesaw, cut a 45° bevel along the top edges of the base assembly (N/O/P) [Drawing 4, Photo J] so that the top of the bevel aligns with the outer edges of the cabinet (A–G).

6 Retrieve the top (I) and cut the top and bottom bevels [Drawing 4a] at the tablesaw.

Add the finishing touches

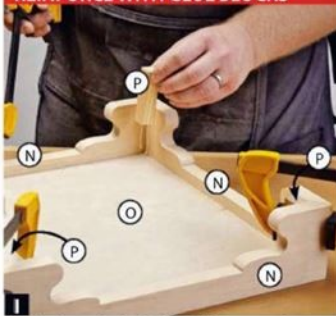
1 Sand all parts and assemblies smooth, progressing from 120 to 150 to 220 grit.

2 Apply a finish to all parts except the drawer boxes (J/K/L). We sprayed on three coats of Zinsser Bull's-Eye aerosol shellac [More Resources].

Quick Tip! For best results when finishing, leave the back (H), top (I), drawer false fronts (M), and base (N/O/P) separate from the cabinet (A–G). When possible, position these parts so you're applying finish to horizontal surfaces to avoid runs and drips.

3 When the finish has dried, slide the back (H) into the cabinet (A–G) but do not glue it in place. Position the cabinet onto the base assembly (N/O/P) [Drawing 4], drill $\frac{1}{32}$ " pilot holes, and secure with #8x1 $\frac{1}{4}$ " flathead screws. Lay the top (I) onto a flat surface with the good face down. Next, flip the cabinet assembly upside down and center it on the top. Then, drill pilot holes into the top through the frame;

REINFORCE WITH GLUE BLOCKS



Apply glue to the back side of the apron miter joints and rub the glue blocks (P) up and down until snug, then clamp as shown.

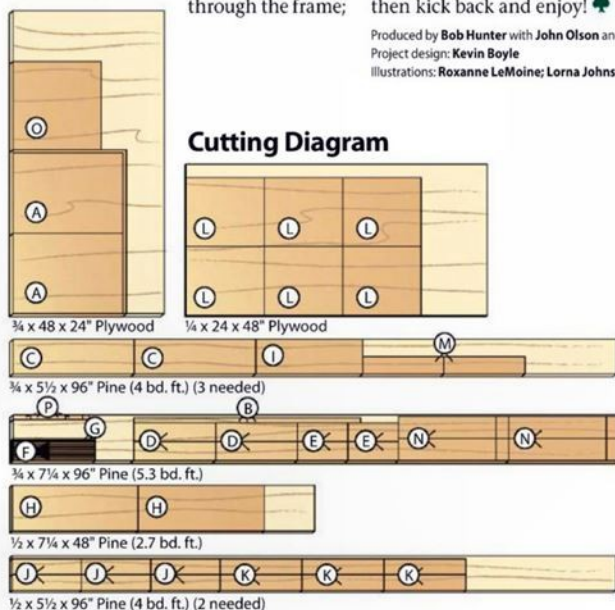
elongate the holes in the frame only to allow the solid-wood top to expand across its width without splitting. Screw the top in place.

4 Attach the drawer pulls to the false fronts (M), and then screw these to the drawer boxes (J/K/L) [Drawing 4]. Insert the drawers into the cabinet and check the gap between each drawer front and the cabinet. To adjust a gap, loosen the screws that secure the false front to the drawer box, reposition it as needed, then retighten. If you need more adjustment, drill out the holes in the drawer-box front (J) slightly.

When finished, place the chest alongside your favorite chair, top it off with a good book or the TV remote control, then kick back and enjoy! 🍷

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Illustrations: **Roxanne LeMoine**; **Lorna Johnson**

Cutting Diagram



BEVEL-CUT THE BASE



When bevel-ripping the assembled base (N–P) at the tablesaw, push on the plywood panel rather than the aprons.

Materials List

Part Cabinet	FINISHED SIZE			Matl.	Qty.
	T	W	L		
*A interior sides	¾"	12¾"	17½"	PL	2
*B interior-side trim	¾"	¾"	17½"	P	
*C exterior sides	¾"	14½"	18½"	EP	2
D frame fronts/ backs	¾"	3"	13"	P	4
E frame sides	¾"	3"	8"	P	4
F drawer guides	¾"	¼"	13"	P	12
G drawer-face trim	¾"	¼"	13"	P	2
*H back	½"	13⅝"	18½"	EP	1
I top	¾"	16"	16"	EP	1
Drawers					
J fronts/backs	½"	2½"	11"	P	12
K sides	½"	2½"	13"	P	12
L bottoms	¾"	10⅛"	12⅝"	PL	6
M false fronts	¾"	2¾"	12⅝"	P	6
Base					
*N aprons	¾"	3½"	15½"	P	4
O bottom panel	¾"	14"	14"	PL	1
P glue blocks	¾"	¾"	2¾"	P	4

*Parts initially cut oversize. See the instructions.

Materials key: PL—plywood, P—pine, EP—edge-glued pine.
Supplies: $\frac{1}{16}$ "x3" dowel (3), $\frac{1}{4}$ " pocket-hole screws (32), #8x1" flathead screws (12), #8x1 $\frac{1}{4}$ " flathead screws (8), #8x2" flathead screws (16).

Drawer pulls: Dark bronze cast round cup pulls (6), no. 01A56.62, \$3.10 each, Lee Valley, 800-871-8158, leevalley.com.

Blade and bits: Stacked dado set; $\frac{1}{2}$ ", $\frac{3}{8}$ ", and $\frac{1}{16}$ " drill bits; $\frac{3}{8}$ " Forstner bit.